

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Withdrawn) An apparatus for press molding a molding material into a press-molded product comprising:

 a mold comprising a first die and a second die, each of said dies having a molding surface facing with the other, said first die being fixed to a structure member of the apparatus and said second die being movable;

 driving means for moving the second die toward and away from the first die;

 heating means for heating said first and second dies;

 detecting means for detecting a displacement of a part of the structure member; and

 a controller for calculating a correction value for a moving distance of the second die based on the detected displacement and controlling the driving means so that the second die moves a distance in accordance with the correction value.

2. (Withdrawn) The apparatus of claim 1 further comprising a temperature controlling means, wherein the detecting means is supported by a supporting member and a temperature of the supporting member is maintained in a predetermined range by the temperature controlling means.

3. (Currently Amended) A method for press-molding a glass optical element by use of an apparatus,

said apparatus including; a mold comprising a first die and a second die, each of said dies having a molding surface facing with the other, said first die being fixed to a structure member of the apparatus and said second die being movable; driving means for moving the second die toward and away from the first die; heating means; detecting means; and a controller,

said method comprising:

supplying said mold with a glass preform between the first die and the second die.

press-molding the glass preform with the first die and the second die,
heating the first and second dies by the heating means,
detecting a displacement of a part of the structure member by the detecting means,
calculating a correction value for a moving distance of the second die based on the
detected displacement by the controller, and
controlling the driving means so that the second die moves a distance in accordance
with the correction value by the controller.

4. (Withdrawn) An apparatus for press molding a molding material into a press-molded product comprising:

 a mold comprising a first die and a second die, each of said dies having a molding surface facing with the other, said first die being fixed to a structure member of the apparatus and said second die being movable;

 driving means for moving the second die toward and away from the first die;

 heating means for heating said first and second dies;

 temperature detecting means for detecting a temperature of a part of the structure member;

 memory means for storing values of displacement in association with the temperatures of the part of the structure member; and

 a controller for calculating a correction value for a moving distance of the second die based on the detected temperature and a value of displacement corresponding thereto, and for controlling the driving means so that the second die moves a distance in accordance with the correction value.

5. (Currently Amended) A method for press-molding a glass optical element by use of an apparatus,

said apparatus including; a mold comprising first die and a second die, each of said dies having a molding surface facing with the other, said first die being fixed to a structure member of the apparatus and said second die being movable; driving means for moving the second die toward and away from the first die; heating means; temperature detecting means ; memory

means for storing values of displacement in association with temperatures of a part of the structure member; and a controller;

said method comprising:

supplying said mold with a glass perform between the first die and the second die,

press-molding the material with the first die and the second die,

heating the first and second dies by the heating means,

detecting the temperature of the part of the structure member by the temperature detecting means,

obtaining a correction value for a moving distance of the second die based on information including the detected temperature and the value of the displacement corresponding to the detected temperature as stored in the memory by the controller, and

controlling the driving means so that the second die moves a distance in accordance with the correction value by the controller.

6. (Withdrawn) A method for press-molding a heated and softened molding material into a press-molded product by use of an apparatus, said apparatus comprising a first die and a second die, each of said dies having a molding surface facing with the other, said first die being fixed to a structure member of the apparatus and said second die being movable, driving means for moving the second die toward and away from the first die, and heating means for heating said first and second dies, said method comprising:

supplying a material between the first die and the second die; and

press-molding the material with the first die and the second die;

wherein a displacement of a part of the structure member due to heat is detected;

a correction value for a moving distance of the second die is calculated based on the detected displacement; and

the driving means is controlled so that the second die moves a distance in accordance with the correction value.

7. (Withdrawn) The method of claim 6 wherein the displacement is detected prior to a press-molding in a press-molding cycle.

8. (Withdrawn) A method for press-molding a heated and softened molding material into a press-molded product by use of an apparatus, said apparatus comprising a first die and a second die, each of said dies having a molding surface facing with the other, said first die being fixed to a structure member of the apparatus and said second die being movable, driving means for moving the second die toward and away from the first die, and heating means for heating said first and second dies, said method comprising:

supplying a material between the first die and the second die, and

press-molding the material with the first die and the second die,

wherein a temperature of a part of the structure member is detected,

a correction value for a moving distance of the second die is obtained based on information including the detected temperature and a value of displacement corresponding to the detected temperature as stored in memory, and

the driving means is controlled so that the second die moves a distance in accordance with the correction value.

9. (New) The method of claim 3 wherein the glass preform is preliminarily heated and softened and has a predetermined shape.

10. (New) The method of claim 3 wherein the structure member of the apparatus is a housing forming the apparatus or a supporting member supporting the mold.

11. (New) The method of claim 5 wherein the glass preform is preliminarily heated and softened and has a predetermined shape.

12. (New) The method of claim 5 wherein the structure member of the apparatus is a housing forming the apparatus or a supporting member supporting the mold.